Gulf of Mexico Harmful Algal Bloom Bulletin

17 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 13, 2007

Conditions Report

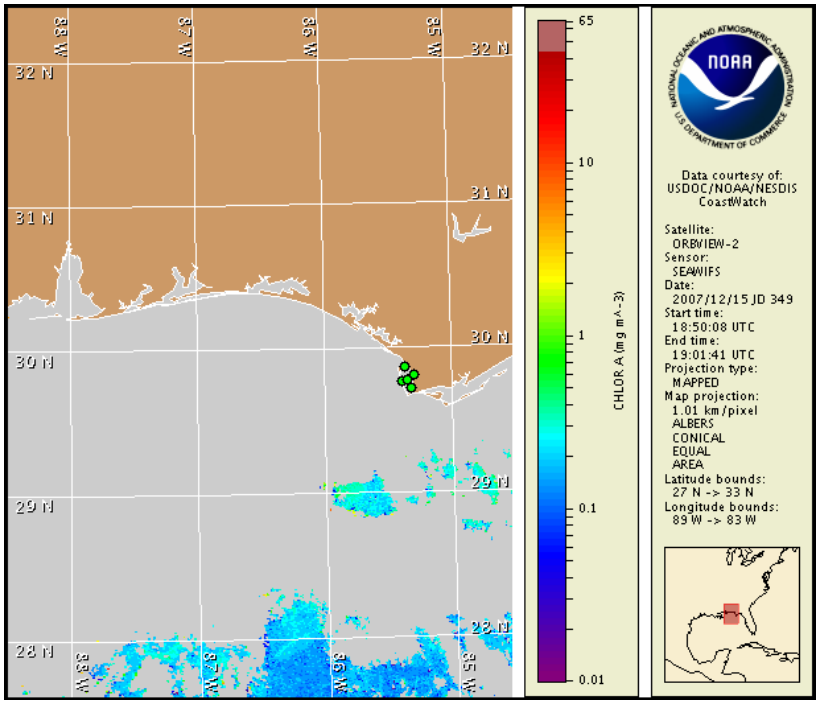
NW Florida: A harmful algal bloom has been identified in patches from Gulf County, Florida to Hancock County, Mississippi. Patchy very low impacts are possible today through Thursday in bay regions of Gulf County. Patchy low impacts are possible for bay regions of Okaloosa County, Florida, with patchy very low impacts possible for coastal Okaloosa County, Florida on Wednesday and Thursday. Patchy very low impacts are possible in Hancock County, Mississippi, and in Mobile and Baldwin Counties, Alabama on Wednesday and Thursday, with no impacts expected today or Tuesday. No other impacts are expected in northwest Florida, Alabama, or Mississippi today through Thursday, December 20.

Analysis

NW Florida: The harmful algal bloom persists in patches along the coasts of Mississippi, Alabama, and the Florida panhandle. Recent sampling results found no *K. brevis* in St. Joseph Bay in Gulf County, Florida (FWRI; 12/12), after background and very low concentrations were confirmed on 12/7 (FWRI). No other recent samples were collected last week along the Florida Panhandle. Satellite imagery (12/16) indicates elevated chlorophyll features along Bay, Walton, and Okaloosa Counties with maximum concentrations at 30°22’41"N, 86°31’45"W and 30° 12’50"N, 86°0’38"W. Continued sampling is recommended.

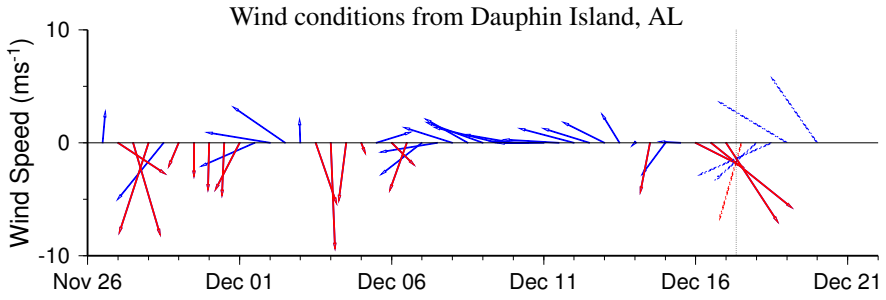
Recent sampling results indicate background to very low concentrations of *K. brevis* (12/14) offshore of Harrison and Hancock County, Mississippi(AL Dept of Public Health). Satellite imagery (12/16) indicates a band of elevated chlorophyll from Santa Rosa County,FL to Hancock County, Mississippi, 30°18’53"N, 87°18’11"W to 30°17’46"N, 89°7’49"W. Continued sampling is recommended. Southerly winds on Wednesday and Thursday may increase the potential for impacts along the coast.

~Keller, Allen



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 7 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

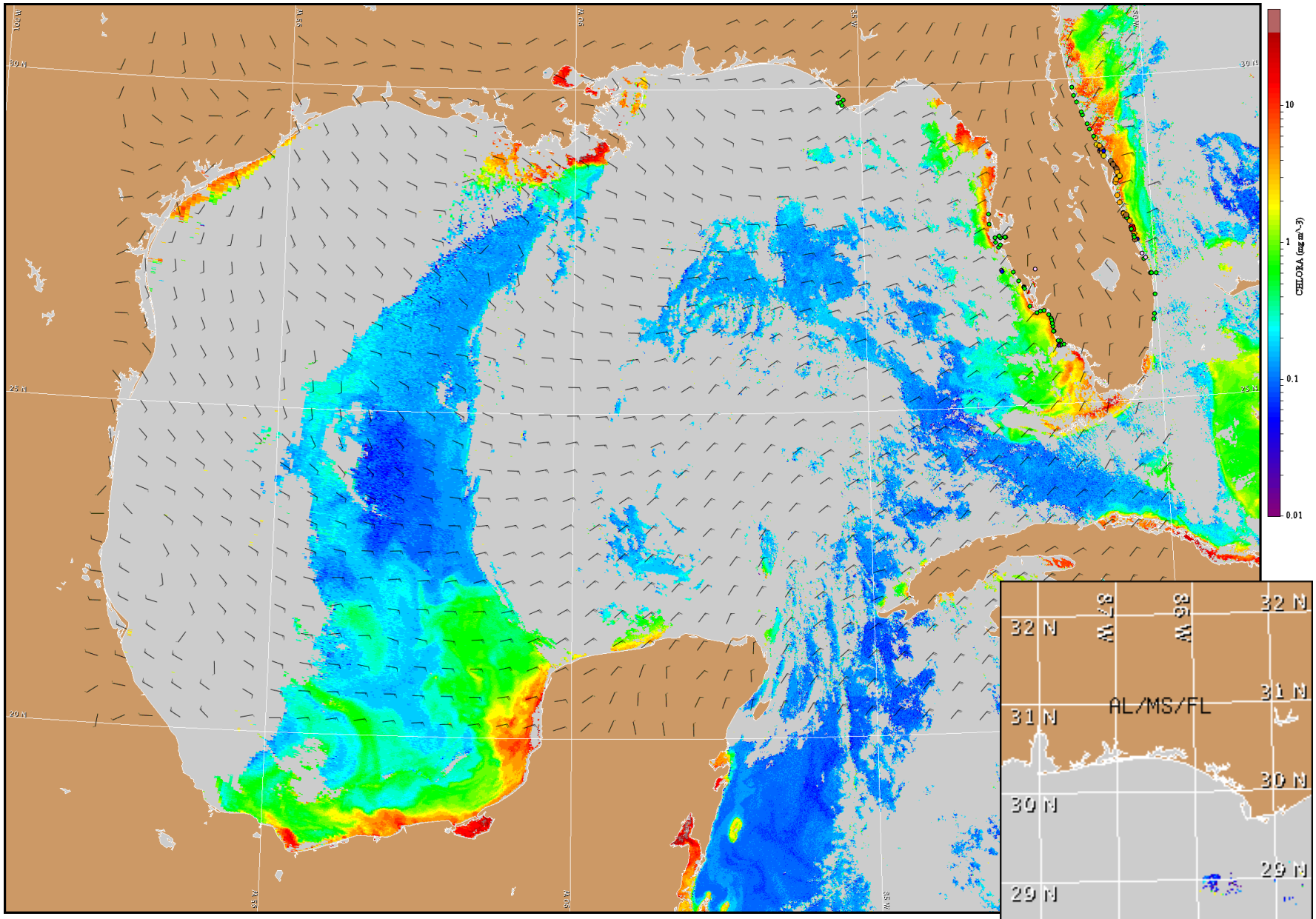


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

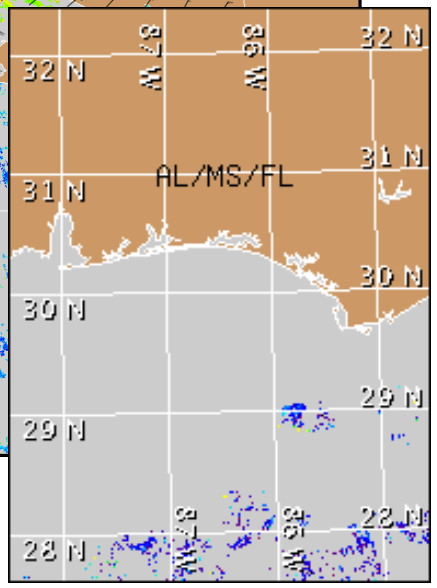
NW Florida: Northerly winds today, becoming northeasterly tonight (10-15 knots; 5-8 m/s). Easterly winds on Tuesday with southeasterly winds on Wednesday (5-10 knots; 3-5 m/s). Southwesterly winds on Thursday (10-15 knots; 5-8 m/s).

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

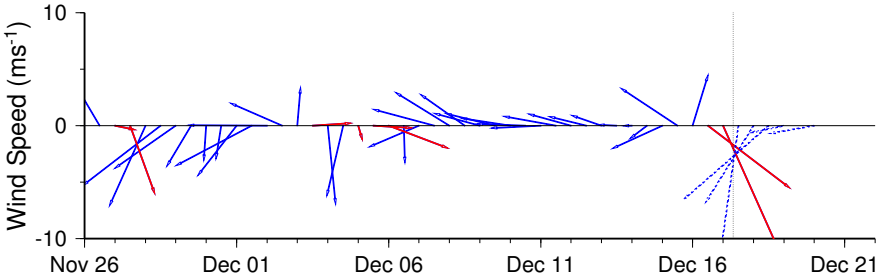


Satellite chlorophyll image and forecast winds for December 18, 2007 12Z with Cell concentration sampling data from December 7 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Tyndall AFB Tower C



Wind conditions from Panama City, FL